

From: [Valerie Oster](#)
To: [Chip Humphrey/R10/USEPA/US@EPA](#); [Eric Blischke/R10/USEPA/US@EPA](#)
Cc: [Rick Applegate](#); [Patty Dost \ \(Schwabe\) \](#); [wolffg@plu.edu](#); [J Betz](#); [Christine Hawley](#); [Bob Wyatt](#); [jpisano@anchorenv.com](#); [valerie](#); [david.ashton@portofportland.com](#); [Jim McKenna@portofportland.com](#)
Subject: FW: Request for Verification of Completion of Round 3B Field Efforts
Date: 02/07/2008 07:55 AM
Attachments: [2008-02-04_DRAFT_Round3B_Completion_Summary_Tables.pdf](#)

Chip, Eric,

Please see below and attached from LWG for your consideration.

thanks
valerie

Valerie Thompson Oster
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-----Original Message-----

From: Christine Hawley [<mailto:chawley@integral-corp.com>]
Sent: Thu 2/7/2008 7:36 AM
To: Jessica Pisano; Valerie Oster
Cc: Rick Applegate; Bob Wyatt; Jim McKenna; David Ashton; Snyder, Joan; Patty Dost (Schwabe); Sandy Browning; Gene Revelas
Subject: Request for Verification of Completion of Round 3B Field Efforts

Hi Valerie/Jessica

Please transmit the attached file and message below to EPA. Thanks!
Christine.

Dear Eric and Chip,

This email summarizes the LWG's Round 3B field efforts and requests written verification from EPA concurring that these efforts are complete. A summary of each Round 3B effort (biota, lamprey toxicity, surface and subsurface sediment, and TZW-related cores) is presented below. Supporting summary tables of target and actual sample counts for biota and sediment sampling are attached. Please do not hesitate to contact the LWG for additional information on these programs to support your assessment of completion.

Completion Summary:

Round 3B Biota

The biota sampling program was conducted between August 27 and December 12, 2007, in accordance with the Round 3B Field Sampling Plan for Fish and Invertebrate Tissue and Collocated Surface Sediment (R3B Biota FSP, Integral 2007a). Round 3B tissue samples were collected to supplement the Round 1, Round 2, and Round 3A fish and invertebrate tissue data. A summary of target and actual sample counts is presented in Table 1 (attached). Deviations from the R3B Biota FSP were coordinated with EPA throughout the field implementation. These deviations included relocation of two sampling stations because of poor habitat for crayfish and sculpin and not scaling carp and smallmouth bass composites prior to filleting. These deviations are documented in the field sampling report, currently under LWG review, and will be provided to EPA in February, 2008.

Lamprey Phase 2 Toxicity Testing

The lamprey toxicity study was completed by January 15, 2008, in accordance with the Round 3 Lamprey Ammocoete Toxicity Testing FSP addendum (Windward 2007). The study evaluated the six test chemicals and successfully met the two general objectives specified by EPA (EPA 2006): (1) documenting that the existing fish toxicity reference values were sufficiently protective of lamprey survival and growth; and (2) identifying the relative sensitivity of Pacific lamprey to adverse contaminant effects by comparing the data with published toxicity data for the most sensitive surrogate species. The only specific FSP objective that could not be met was derivation of LC50 values for lindane and naphthalene. These values could not be derived because of inadequate ammocoete mortality at the highest test concentrations. In both cases, the maximum test concentration was the maximum concentration that the lab was able to achieve; and, in both cases, the maximum test concentration was sufficiently high, relative to literature LC50s for other species, to satisfy the general objectives specified by EPA.

Round 3B Sediment and Bioassays

The sediment sampling program was conducted between November 14, 2007 and January 17, 2008, in accordance with the Round 3B Comprehensive Sediment and Bioassay Testing Field Sampling Plan (R3B Sediment FSP; Integral 2007b). Round 3B sediment data will be used to address data gaps related to site characterization, ecological and human health risks, and the FS. A summary table of target and actual station and sample counts is attached (see Table 2). Deviations from the R3B Sediment FSP were coordinated with EPA throughout the field implementation. These deviations included shifts in target sampling locations and abandonment of a few sampling locations. These deviations are documented in detail in the field sampling report, which will be provided to EPA in March, 2008. The 10-day sediment toxicity test with *Chironomus dilutus* and the 28-day sediment toxicity test with *Hyalella azteca* were performed on 56 sediment samples collected between RM 1 and 12.2. Each test was performed with a negative control and sediment collected at four upstream locations. The laboratory has completed all the tests and has reported that all tests met the specific acceptability criteria.

Round 3B TZW

From the meeting with the EPA and Oregon Department of Environmental Quality (DEQ) on June 27, 2007, an investigation was initiated to further evaluate concerns about a possible in-river discharge of a chlorinated solvent plume offshore of the Gunderson Area 1 site. The specific objective of this data collection effort was to gather additional information to evaluate the stratigraphic trend of the deep conductive (gravel/sand) zone offshore of the Gunderson Area 1 site. In accordance with the EPA-approved Round 3 GWPA FSP (Integral 2007c), nine stratigraphic cores were collected offshore of the Gunderson Area 1 site between October 16 and October 19, 2007. These stratigraphic results were discussed with EPA and DEQ in a meeting on November 5, 2007. On November 8, 2007, EPA indicated to the LWG that the agencies concurred that the stratigraphic data did not indicate the need for follow-up TZW sampling. Therefore, the Round 3 GWPA offshore of the Gunderson Area 1 site was concluded on November 5, 2007. The coring investigation results are detailed in the Round 3 GWPA FSR (Integral 2007d).

References

EPA. 2006. Letter to Lower Willamette Group from C. Humphrey and E. Blischke dated October 31, 2006 regarding Portland Harbor RI/FS Field Sampling Plan: Round 3 lamprey ammocoete toxicity testing field sampling plan. US Environmental Protection Agency Region 10, Oregon Operations Office, Portland, OR.

Integral. 2007a. Round 3B Field Sampling Plan for Fish and Invertebrate Tissue and Collocated Surface Sediment. IC07-0019. Prepared for the Lower Willamette Group, Portland, OR. Integral Consulting Inc., Mercer Island, WA.

Integral. 2007b. Round 3B Comprehensive Sediment and Bioassay Testing Field Sampling Plan. IC07-0024. Prepared for the Lower Willamette Group, Portland, OR. Prepared by Integral Consulting, Windward Environmental, and Anchor Environmental.

Integral. 2007c. Portland Harbor RI/FS Round 3 Groundwater Pathway Assessment Field Sampling Plan for Stratigraphic Coring and Transition Zone Water Sampling - Gunderson. IC07-0022. Prepared for the Lower Willamette Group, Portland, OR. Integral Consulting Inc., Mercer Island, WA.

Integral. 2007d. Portland Harbor RI/FS Round 3 Groundwater Pathway Assessment Field Sampling Report for Stratigraphic Coring - Gunderson. IC07-0035. Prepared for the Lower Willamette Group, Portland, OR. Integral Consulting Inc., Mercer Island, WA.

Windward. 2007. Round 3 Lamprey Ammocoete Toxicity Testing FSP Addendum. Prepared for the Lower Willamette Group, Portland, OR. WE-07-0006. Windward Environmental, Seattle, WA.

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